

Appl. No. 10/734,335
Amdt. Dated 6/27/2007
Reply to Office action of 4/13/2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1. (Currently Amended) A method comprising:
defining a plurality of minutiae in a fingerprint image including data related to x,y coordinates and an angle for a minutia;
estimating a score associated with a minutia corresponding to ~~the~~ a validity of the minutia including noise associated with the minutia for the fingerprint image; and
matching the fingerprint image against one or more sample fingerprint images utilizing a two-dimensional partial point set pattern matching (PSPM) algorithm under translation and rotation utilizing the score.
2. (Canceled).
3. (Currently Amended) The method of claim 1, wherein a the definition of a the minutia includes data related to a classification of the minutia as a termination or bifurcation minutia.
4. (Currently Amended) The method of claim 1, wherein a the definition of a the minutia includes data related to the estimated score for the minutia.
5. (Currently Amended) The method of claim 1, wherein estimating a the score associated with a the minutia includes estimating a the score for ridge flow properties associated with the minutia.
6. (Currently Amended) The method of claim 1, wherein estimating a the score associated with a the minutia includes estimating a the score for valley flow properties associated with the minutia.

Appl. No. 10/734,335
Amdt. Dated 6/27/2007
Reply to Office action of 4/13/2007

7. (Canceled).
8. (Currently Amended) The method of claim 1, wherein estimating a the score associated with a the minutia includes determining a the score by summing a the score for ridge flow properties, valley flow properties, and noise associated with the minutia.
9. (Canceled).
10. (Currently Amended) An apparatus comprising:
an integrated circuit; and
a processor included with the integrated circuit to implement operations including:
defining a plurality of minutiae in a fingerprint image including data related to x,y coordinates and an angle for a minutia;
estimating a score associated with a minutia corresponding to a the validity of the minutia including noise associated with the minutia for the fingerprint image; and
matching the fingerprint image against one or more sample fingerprint images utilizing a two-dimensional partial point set pattern matching (PSPM) algorithm under translation and rotation utilizing the score.
11. (Canceled).
12. (Currently Amended) The apparatus of claim 10, wherein a the definition of a the minutia includes data related to a classification of the minutia as a termination or bifurcation minutia.
13. (Currently Amended) The apparatus of claim 10, wherein a the definition of a the minutia includes data related to the estimated score for the minutia.
14. (Currently Amended) The apparatus of claim 10, wherein estimating a the score associated with a the minutia includes estimating a the score for ridge flow properties associated with the minutia.

Appl. No. 10/734,335
Amdt. Dated 6/27/2007
Reply to Office action of 4/13/2007

15. (Currently Amended) The apparatus of claim 10, wherein estimating a the score associated with a the minutia includes estimating a the score for valley flow properties associated with the minutia.

16. (Canceled).

17. (Currently Amended) The apparatus of claim 10, wherein estimating a the score associated with a the minutia includes determining a the score by summing a the score for ridge flow properties, valley flow properties, and noise associated with the minutia.

18. (Canceled).

19. (Currently Amended) A machine-readable medium having stored thereon instructions, which when executed by a machine, cause the machine to perform the following operations comprising:

defining a plurality of minutiae in a fingerprint image including data related to x,y coordinates and an angle for a minutia;

estimating a score associated with a minutia corresponding to ~~the~~ a validity of the minutia including noise associated with the minutia for the fingerprint image; and

matching the fingerprint image against one or more sample fingerprint images utilizing a two-dimensional partial point set pattern matching (PSPM) algorithm under translation and rotation utilizing the score.

20. (Canceled).

21. (Currently Amended) The machine-readable medium of claim 19, wherein a the definition of a the minutia includes data related to a classification of the minutia as a termination or bifurcation minutia.

22. (Currently Amended) The machine-readable medium of claim 19, wherein a the definition of a the minutia includes data related to the estimated score for the minutia.

Appl. No. 10/734,335
Amdt. Dated 6/27/2007
Reply to Office action of 4/13/2007

23. (Currently Amended) The machine-readable medium of claim 19, wherein estimating a the score associated with a the minutia includes estimating a the score for ridge flow properties associated with the minutia.

24. (Currently Amended) The machine-readable medium of claim 19, wherein estimating a the score associated with a the minutia includes estimating a score for valley flow properties associated with the minutia.

25. (Canceled).

26. (Currently Amended) The machine-readable medium of claim 19, wherein estimating a the score associated with a the minutia includes determining a the score by summing a the score for ridge flow properties, valley flow properties, and noise associated with the minutia.

27. (Canceled).